

METHOD AND SYSTEM FOR BALANCING LOAD DISTRIBUTION ON A WIDE AREA NETWORK

Abstract of the Disclosure

A system and method for balancing the load on virtual servers managed by
5 server array controllers at separate data centers that are geographically distributed on
a wide area network such as the Internet. The virtual servers provide access to
resources associated with a domain name request by a client program. When a
Primary Domain Name System (DNS) determined the requested domain name is
delegated to a EDNS, the EDNS employs metric information and statistics to resolve
10 an ip address for a virtual server that is selected by the EDNS to optimally balance
the load and provide access to resources associated with the domain name. The
EDNS may employ a static or a dynamic load balancing method to select the virtual
server most suited to balance the load across all of the virtual servers. The EDNS
may include a Primary DNS or a Secondary DNS. The EDNS employs an agent
15 program located at geographically distributed data centers to collect metric
information related to a host machine, server array controller, virtual servers and the
path for providing resources associated with the domain name to a client making the
request. The EDNS collects the metric information from the agent program out of
band of the domain name resolution process. The server array controller may include
20 the agent program and the agent program may be provided as a stand alone machine
that is coupled to the server array controller or a host machine.